

US Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555 L-2004-235 10 CFR 50.4

OCT 2 9 2004

Re: St. Lucie Units 1 and 2 Docket Nos. 50-335, 50-389 Seabrook Station Docket No. 50-443 Generic Letter 2003-01

Supplemental Response - Control Room Habitability (Generic Letter 2003-01)

This letter supplements the Florida Power and Light Company (FPL) and FPL Energy Seabrook, LLC (FPL Energy Seabrook) 180-day responses to Generic Letter (GL) 2003-01, Control Room Habitability, for St. Lucie Unit 1 and Unit 2 and FPL Energy Seabrook (FPL Letter L-2003-299 dated December 9, 2003). Response 1(c) for St. Lucie Units 1 and 2 and Seabrook Station stated that based on NRC staff approval of Technical Specification Task Force (TSTF) TSTF-448, "Control Room Habitability," by April 2004, FPL and FPL Energy Seabrook planned to submit Technical Specification amendment requests by October 30, 2004. The NRC has not yet approved TSTF-448; therefore, FPL and FPL Energy Seabrook will submit license amendment requests modeling the TSTF within six months of its approval by the NRC.

In addition, Attachment 1 of this letter updates St. Lucie's response 1(a) to account for the final control room in-leakage qualified test results based on a NUCON International test report. The final results were not available at the time of the 180-day response to GL 2003-01. Please note that final test results were provided for Seabrook Station in the original submittal.

On August 11, 2003, FPL and FPL Energy Seabrook provided 60-day response letters to the subject GL (St. Lucie, L-2003-211, Seabrook NYN-03070) where it was conservatively assumed that tracer gas testing planned in August/September 2003 would demonstrate that current design basis in-leakage assumptions may not be met. Each site concluded that the information requested in Item 1 of GL 2003-01 could not be provided by the required December 9, 2003, 180-day GL response date. Based on this conclusion, each site stated that plans would be made to submit a license amendment request to the NRC to adopt the 10 CFR 50.67 alternate source term methodology for assessing the radiological consequences of design basis events.

On September 18, 2003, St. Lucie Unit 1 and St. Lucie Unit 2 submitted License Amendment Requests (L-2003-224 and L-2003-220) requesting implementation of the alternate source term methodology. On October 6, 2003, FPL Energy Seabrook submitted License Amendment Request 03-02 "Implementation of Alternate Source Term" (NYN-03061) requesting implementation of the alternate source term methodology.

If you have any questions, please contact Rajiv Kundalkar at (561) 694-4848.

Senior Vice President, Nuclear and Chief Nuclear Officer

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## St. Lucie Units 1 and 2 Supplemental Response 1(a) Baseline Integrated Control Room Inleakage Test

The response to Item 1(a) is supplemented to provide the final St. Lucie Unit 1 and Unit 2 baseline control room inleakage test results. The following section, Final Baseline Integrated Control Room In-leakage Test, replaces the original response subsection of Response 1(a).

## Final Baseline Integrated Control Room Inleakage Test

NUCON performed the control room tracer gas tests to measure control room inleakage.

The control room ventilation systems at St. Lucie are automatically aligned to the isolated mode by either a containment isolation signal or a control room outside air intake radiation monitor alarm. The operators are then directed within the EOPs to realign control room ventilation to the filtered makeup (pressurized) mode. The testing by NUCON was performed to account for these modes of operation.

For the isolated mode, the concentration decay test method of ASTM E741-00, as documented in NEI 99-03 was used. For the pressurized mode, the constant injection test method of ASTM E741-00 was used. The constant injection method for a pressurized control room is also consistent with guidance provided by NEI 99-03.

The final validated in-leakage test values including uncertainties are as follows:

Unit	Isolated	Pressurized
Unit 1	349 cfm	423 cfm
Unit 2	229 cfm	26 cfm

A FPL engineering evaluation assessed plant operability based on the results of the tracer gas testing measurements. This evaluation and supporting calculations provided a maximum allowable inleakage value for each of the two St. Lucie Units using UFSAR methodology with best-estimate assumptions. The limits on inleakage values documented in this evaluation are 500 cfm for Unit 1 and 430 cfm for Unit 2. With these in-leakage values, radiological analyses for control room habitability meet the GDC 19 acceptance criteria.

Based on the above information, the measured unfiltered in-leakage rates using tracer gas testing methodology with worst-case conditions anticipated post-accident are below the values used in the plant operability analysis. Therefore, no compensatory actions are currently required.

The St. Lucie current licensing bases for the radiological consequences for accidents as described in both UFSARs are based on source term methodologies and assumptions derived from Technical Information Document (TID) 14844. 10 CFR 50.67 was issued by the NRC to permit revising the traditional accident source term used in the design basis accident

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radiological consequence analyses with an Alternate Source Term. St. Lucie plant has submitted to the NRC a request to implement the use of the alternate source term [letters L-2003-220 (Unit 2) and L-2003-224 (Unit 1)]. When approved and implemented, the control room envelope (CRE) unfiltered in-leakage limiting design bases values will increase based on the use of the alternate source term, and the unfiltered in-leakage into the CREs measured during the tracer gas testing will be within the revised design bases values.